

CIVIL AIR DEFENSE WARNING SYSTEM  
(CADW)  
BELL AND LIGHTS  
STATION EQUIPMENT - IDENTIFICATION

1. GENERAL

1.01 This section covers general information on the station equipment installed at civil defense control points and warning stations. This equipment provides coded visual signals and coded or noncoded audible signals for warnings transmitted to key stations.

1.02 It is reissued to delete reference to the (Y) Yellow Alert Signal and to up-date instruction card reference (except Nevada).

1.03 The following attack Actual Warning signals are transmitted as public signals to indicate the degree of alert:

<u>Color of Light</u>	<u>Type of Signal</u>
Blue (B)	Authentication
Red (R)	Take Cover

NOTE: The White (All Clear) Signal is no longer transmitted at the end of the Actual Warning Signals (see instruction cards GA126 and GA127). There is a change in the transmitting of the Test Warning Signals. (See instruction cards GA126 and GA127).

1.04 Equipment at the control locations consists of a special dial (Fig. 1) and a station signal indicator (Fig. 2) arranged to provide coded visual signals, as well as the associated coded or noncoded audible signals. At the warning stations, either the station signal indicator which incorporates the audible signal or an audible-only signal is installed.

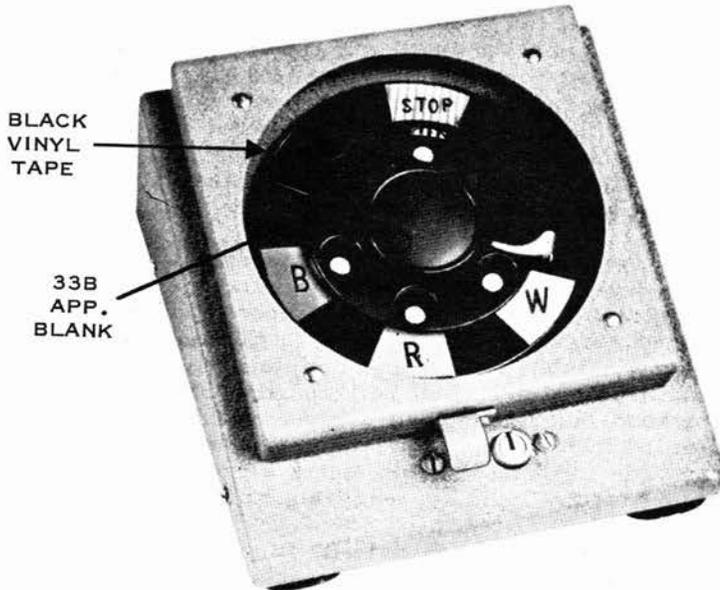


Fig. 1 - CADW Dial with Cover Closed

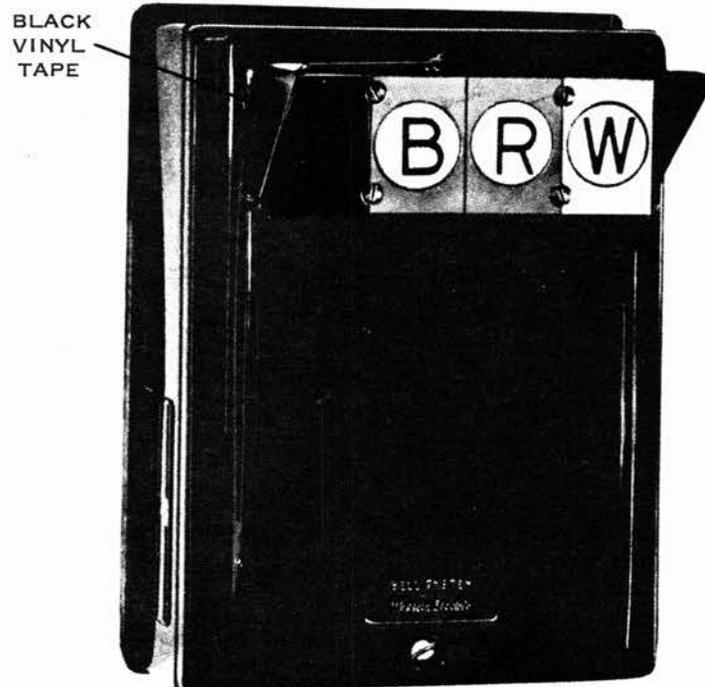


Fig. 2 - CADW Station Signal Indicator

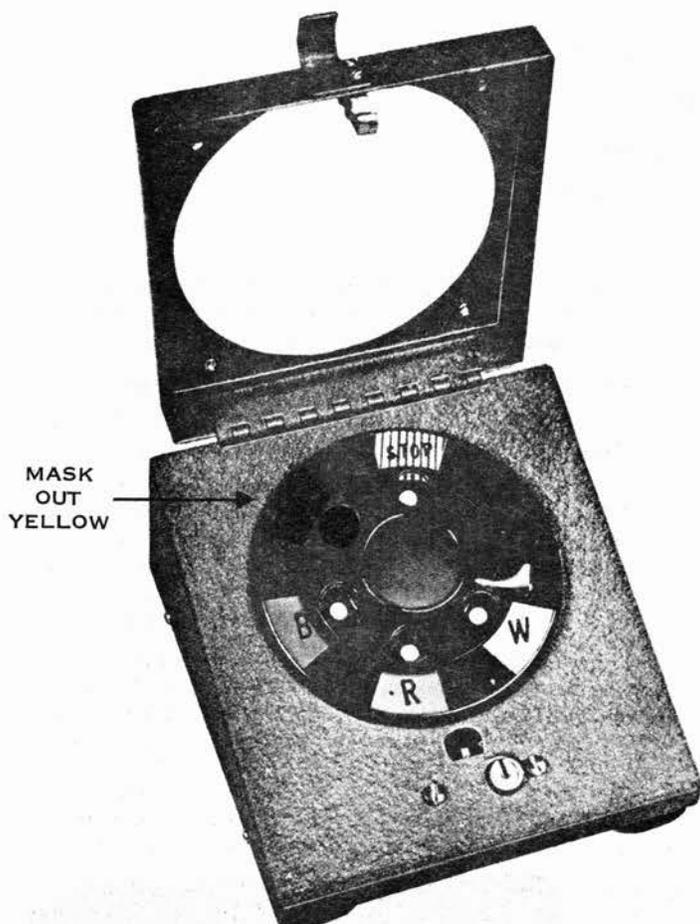


Fig. 3 - CADW Dial with Cover Open

1.05 At certain locations, public audible signals (sirens) are installed by the customer and controlled at the central office by a public signal control unit.

1.06 Important stations may be associated with central office equipment for automatic self-test on these individual lines.

## 2. DESCRIPTION

2.01 The dial is a modified 7-type with a special finger wheel having only five finger holes. The number plate is marked with black letters on colored fields.

2.02 The dial is mounted in a gray-green wrinkle-finish metal housing (approximately 6 inches square) with an inclined top. A hinged cover with Plexiglas window protects the dial. The cover also has a lock and key. In case of emergency, the cover may be forced open without the key, but the key is required for relocking (Fig. 3).

2.03 The station signal indicator shown in Fig. 2 is a modified 531A subscriber set having four 359A cold cathode electron tubes with several resistors. The tubes protrude through an opening in the subscriber set cover, and are protected by a plastic designation strip which diffuses the tube brilliance through a translucent window. The set is so wired that the signal dialed lights the corresponding tube.

2.04 A BlAL ringer is included in the station signal indicator and is equipped with two 41B gongs and 101A gong attachments with knockouts removed. A 592A or B subscriber set may be substituted for the normal ringer.

2.05 An external nonlocking 6017-type key may be associated with the ringer circuit so that the customer may silence the ringer during a part of any prolonged warning signal.

2.06 Where coded visual signals are not provided, the 687A subscriber set or equivalent is used. In small communities where warning stations are connected to single-line or 5-line capacity units at the central office, the audible-only signal should not be used since only steady (noncoded) ringing is supplied. Steady ringing in such cases would convey no information.

2.07 In larger communities where 8-line or 50- to 200-line capacity units are employed at the central office, superimposed coded ringing is transmitted to the line on a 4-party, fully selective principle. This activates both the station bell and the cold cathode tube throughout a given warning period. On an actual warning, the bell rings and the associated lamp lights according to a distinctive code for each signal, as follows:

- Authentication Signal (B) Blue  
Three short rings (1/2 second each) pause (1-1/2 seconds)-Repeated. This is a 30 second signal and always precedes an Alert or Take Cover Signal.
- Take Cover Signal (R) Red  
Continuous short rings (1/2 second each) This is a 3 minute signal and is preceded by a 30 second Blue Signal.

NOTE: Each alert is automatically timed for the period stated unless interrupted by a new signal.

2.08 A KS-16626, List 13 power relay set is required at public siren locations. When continuous line test is required, the relay set should be modified with a KS-8512, List 6A resistor.

### 3. DIALING

3.01 All numbers must be dialed twice to operate associated equipment in the central office. STOP requires only one dialing. In the event of incorrect dialing, dial STOP to release central office equipment; then redial.

### 4. INSTRUCTION CARDS

4.01 Originating Station Form GA126 (2-67) shall be provided at each originating station location and Receiving Station Form GA127 (2-67) shall be provided at each receiving station location.

4.02 Order instruction cards by form number. Order as standard, nonstock on a stationery requisition as follows:

(Quantity) Form GA126

(Quantity) Form GA127

### 5. MODIFICATION

5.01 The following part covers the necessary steps to remove the Yellow Alert Signal from the system.

5.02 Material required:

- 1-No. 33B Apparatus Blank (Orig. Sta. Only)
- 1-Roll, Black Vinyl Tape

5.03 *At locations with CADW Dial (Fig. 1):*

Step A - Remove the fingerwheel from the dialing instrument.

Step B - Insert the 33B apparatus blank into the Yellow Alert Signal fingerhole.

Step C - Bend the six flanges of the apparatus blank locking it to the fingerwheel.

Step D - Cover the Yellow Signal Designation of the dial number plate using black vinyl tape trimmed as in Fig. 4 (or as required).

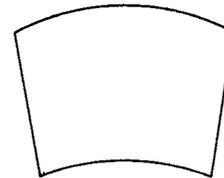


Fig. 4

Step E - Replace the fingerwheel.

5.04 *At locations with CADW Station Signal Indicator, trim black vinyl tape to cover (Y) Indicator as shown in Fig. 2.*

